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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/786,455	02/24/2004	Kei Sakagami	B-5382 621724-9	4911
r. 7:	590 01/31/2008		EXAM	INER
LADAS & PARI	RY		PAUL, I	DISLER
- Suite #2100			ART UNIT	PAPER NUMBER
5670 Wilshire Bou Los Angeles, CA			2615 DATE MAILED: 01/31/2008	8

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 815 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 815 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

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NOTICE OF ALLOWANCE AND FEE(S) DUE

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01/31/2008

LADAS & PARRY Suite #2100 5670 Wilshire Boulevard Los Angeles, CA 90036-5679

EXAMINER						
PAUL, DISLER						
ART UNIT	PAPER NUMBER					
2615						

4911

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	•	ATTORNEY DOCKET NO.	CONFIRMATION NO.
					

10/786,455 02/24/2004

Kei Sakagami

B-5382 621724-9

DATE MAILED: 01/31/2008

TITLE OF INVENTION: CIRCUIT AND PROGRAM FOR PROCESSING MULTICHANNEL AUDIO SIGNALS AND APPARATUS FOR REPRODUCING SAME

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	04/30/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

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- III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

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Los Angeles, CA	1 90030-3079						(Depositor's name)
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							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	₹	ATTORNEY	DOCKET NO.	CONFIRMATION NO.
10/786,455	02/24/2004		Kei Sakagami		B-5382	621724-9	4911
TITLE OF INVENTIO REPRODUCING SAME		PROGRAM FOR PRO	CESSING MULTICHA				
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSU	E FEE TOT	AL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	•	\$1740	04/30/2008
EXAM	INER	ART UNIT	CLASS-SUBCLASS] .			
PAUL, D	DISLER	2615	381-027000	_			
CFR 1.363). Change of corresponded and Change of Change o	3/122) attached. cation (or "Fee Address	inge of Correspondence	For printing on the (1) the names of up t or agents OR, alternat (2) the name of a sing registered attorney or 2 registered patent attlisted, no name will be	o 3 registered patentively, the firm (having as a agent) and the name orneys or agents. If	t attorneys member a es of up to	_	
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Issue Fee	o small entity discount	narmittad)	A check is enclosed. Payment by credit ca	rd Form PTO-2038	t is attached		,
,	of Copies		The Director is hereb	y authorized to char	ge the require	ed fee(s), any de	ficiency, or credit any n extra copy of this form).
			overpayment, to Dep	osit Account Numb	er	(enclose a	n extra copy of this form).
	tus (from status indicate s SMALL ENTITY statu	•	☐ b. Applicant is no los	nger claiming SMA	LL ENTITY S	status. See 37 CI	FR 1.27(g)(2).
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this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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1	Application No.	Applicant(s)
	10/786,455	SAKAGAMI ET AL.
Notice of Allowability	Examiner	Art Unit
	Disler Paul	2615
The MAILING DATE of this communication appear All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS of the Office or upon petition by the applicant. See 37 CFR 1.313 1. This communication is responsive to 11/16/07. 2. The allowed claim(s) is/are 1.4 and 6-9. 3. Acknowledgment is made of a claim for foreign priority under the communication of the communication of the communication of the communication is responsive to 1. Some of the priority documents have 2. Certified copies of the priority documents have	ears on the cover sheet with the country (OR REMAINS) CLOSED in this application or other appropriate communication (IGHTS). This application is subject to a and MPEP 1308. Index 35 U.S.C. § 119(a)-(d) or (f). The been received. The been received in Application No.	orrespondence address plication. If not included will be mailed in due course. THIS withdrawal from issue at the initiative
3. Copies of the certified copies of the priority do	cuments have been received in this	national stage application from the
International Bureau (PCT Rule 17.2(a)).		
* Certified copies not received:		
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.	MENT of this application.	
4. A SUBSTITUTE OATH OR DECLARATION must be subminFORMAL PATENT APPLICATION (PTO-152) which give	nitted. Note the attached EXAMINER es reason(s) why the oath or declara	t'S AMENDMENT or NOTICE OF ation is deficient.
5. CORRECTED DRAWINGS (as "replacement sheets") mus	st be submitted.	
(a) ☐ including changes required by the Notice of Draftspers	son's Patent Drawing Review (PTO	-948) attached
1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date		
(b) including changes required by the attached Examiner Paper No./Mail Date		
Identifying indicia such as the application number (see 37 CFR feach sheet. Replacement sheet(s) should be labeled as such in	i.64(c)) should be written on the draw the header according to 37 CFR 1.121	(d).
DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT	osit of BIOLOGICAL MATERIAL	must be submitted. Note the
Attachment(s) 1. ⊠ Notice of References Cited (PTO-892)	5. ☐ Notice of Informal	Patent Application
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)	6. Interview Summar	y (PTO-413),
3. ⊠ Information Disclosure Statements (PTO/SB/08),	Paper No./Mail Da 7. Examiner's Amend	ate Iment/Comment
Paper No./Mail Date <u>2/24/04;8/4/05</u> 4. Examiner's Comment Regarding Requirement for Deposit	8. 🖾 Examiner's Statem	ent of Reasons for Allowance
of Biological Material	9. Other	MAO -
		XU MEI PRIMARY EXAMINER

Application/Control Number:

10/786,455 Art Unit: 2615

DETAILED ACTION

Allowable Subject Matter

1. Claims 1,4,6-9 are allowed.

Re claim 1, While, Iwamatsu disclose a circuit for processing multichannel audio signals (fig.1/ Lt, Rt to be processed), comprising: a frequency characteristics correction device for correcting frequency characteristics of an audio signal of a center channel, utilizing correction characteristics determined based on a head related transfer function to output a corrected channel with mixing and outputting the signal.

However, Iwamatsu fail to disclose of the specific wherein a band-pass filter for extracting a predetermined frequency band from the corrected signal from the frequency characteristics correction device to output an extracted signal; a band eliminate filter for removing said predetermined frequency band from the corrected signal from the frequency characteristics correction device to output central channel audio signals; an output device for mixing the audio signal component having the frequency characteristics corrected said extracted signal with an audio signal of the right channel and an audio signal of the left channel to generate mixed output audio

Application/Control Number:

10/786,455 Art Unit: 2615

signals, and outputting said mixed output audio signals as a right channel output audio signal and a left channel output audio signal.

Similarly, independent claims 8-9 have been analyzed and allowed in view of the same limitations as disclose in claim 1.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Disler Paul whose telephone number is 571-270-1187. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chin Vivian can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

2

DP

Information Disclosure Statement USSN 10/786,455

July 29, 2005 Page 4

Form PTO-1449 (Modified)	ATTY DOCKET NO. B-5382 621724-9	U.S. SERIAL NO. 10/786,455	
LIST OF PATENTS AND PUBLICATIONS	APPLICANT(S) Kei SAKAGAMI, et al.		
STATEMENT	Filing DATE February 24, 2004	group 2644	

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	ISSUE DATE	NAME	CLASS	SUBCLASS	FILING DATE OF 102(0) DATE IP APPROPRIATE

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY	CLASS	CLY88	TRANSLATION YES/NO
/DP/	10-336797	12/1998	JР			English-language abstract and translation
/DP/	97/25834	7/1997	WO			
/DP/	01/60118 Al	8/2001	WO			

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER	DATE CONSIDERED
/Disler Paul/	07/04/2007
IDISIEI Fauil	was approximately fine

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Information Disclosure Statement February 24, 2004 Page 3

Form PTO-1449 (Modified)	ATTY DOCKET NO. B-5382 621724-9	v.s. serial no. not yet assigned	
LIST OF PATENTS AND PUBLICATIONS	APPLICANT(S) Kei SAKAGAMI, et al.		
STATEMENT	FILING DATE concurrently herewith	group not yet assigned	

						U	S. PATEN	T DOCUMENTS
EXAMINER INITIAL	рос	UMENT	NUMBER	ISSUE DATE	NAME	CLASS	SUBCLASS	FILING DATE or 102(e) DATE IF APPROPRIATE

			FOREIGN PATENT DOCUM			DUCUMENT
	DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES/NO
/DP/	09-037384	02/1997	JР			abstract

OTHER DOCUMENTS (Including Autho	r. Title, Date, Pertinent Pages, Etc.1	
EXAMINER	DATE CONSIDERED	
	07/04/0007	

/Disler Paul/

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Notice of References Cited Application/Control No. 10/786,455 Examiner Disler Paul Applicant(s)/Patent Under Reexamination SAKAGAMI ET AL. Page 1 of 1

U.S. PATENT DOCUMENTS

	Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
_			Iwamatsu, Masayuki	381/18
		 	Klayman et al.	381/98
				381/1
				381/302
				381/22
		 		381/27
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	A B C D E F G H I J K L	Country Code-Number-Kind Code A US-5,727,067 B US-7,043,031 C US-2002/0015499 D US-7,292,697 E US-6,914,988 F US-4,841,573 G US- H US- I US- J US- K US-	Country Code-Number-Kind Code MM-YYYY A US-5,727,067 03-1998 B US-7,043,031 05-2006 C US-2002/0015499 02-2002 D US-7,292,697 11-2007 E US-6,914,988 07-2005 F US-4,841,573 06-1989 G US- H US- J US- K US-	Country Code-Number-Kind Code MM-YYYY Name A US-5,727,067 03-1998 Iwamatsu, Masayuki B US-7,043,031 05-2006 Klayman et al. C US-2002/0015499 02-2002 Willems, Stefan Marghuerite Jean D US-7,292,697 11-2007 Tatsuta et al. E US-6,914,988 07-2005 Irwan et al. F US-4,841,573 06-1989 Fujita, Shinichi G US- US- I US- US- J US- US- L US- US-

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
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NON-PATENT DOCUMENTS

NON-PATENT DOCUMENTS					
*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)			
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*^ **		is reference is not being furnished with this Office action. (See MPEP § 707.05(a).)			

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